# DESCRIPTIONS OF SOME NEW ARANEIDÆ OF NEW SOUTH WALES. No. 3.

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(Plate x.)

The present paper contains descriptions of four species of spiders new to science, for which I am indebted to Mr. A. M. Lea, whose name I have much pleasure in connecting with one of them (Epëira Leai). I desire herewith to place on record my gratitude to that gentleman for the valuable assistance he has rendered me in connection with my investigations into the Araneidan-fauna of New South Wales, by collecting numerous specimens from a wide range of localities.

The most interesting, varied, and striking forms are found amongst the pygmies rather than the larger representatives of this order, and it is owing to his care in procuring so many specimens of *Micro-Araneidæ* that the collections made by Mr. Lea are so valuable.

Family EPEIRIDÆ.

Genus EPEIRA, Walck.

EPEIRA LEAI, sp.nov.

(Plate x. fig. 1.)

Q. Cephalothorax, 3 mm. long, 2 mm. broad; abdomen, 5 mm. long, 3 mm. broad.

Cephalothorax yellow-brown, sparingly hairy. Caput truncated in front, elevated and rounded on the sides, normal grooves distinct. Clypeus convex, yellow-brown, with faint lateral striations

and a few short hoary hairs. Marginal band narrow, dark brown, fringed with minute dark hairs.

Eyes jet-black; the four comprising the central group forming a square or nearly so, the posterior pair largest of the eight; the lateral pairs placed obliquely on tubercles, not contiguous.

Legs yellow-brown, with dark annulations at joints, long, strong, furnished with moderately long yellowish hairs and short strong spines; relative lengths, 1, 2, 4, 3; second and third pairs equal; each tarsus terminated with four claws, the three superior ones much the longest and strongest, pectinated near their base on the underside; in addition to these each posterior leg has a strong movable spine (sustentacula) inserted near the termination of the tarsus.

Palpi moderately long, somewhat paler than the legs, furnished with long coarse hairs, and each terminated by a rather long and strong pectinated claw.

Falces yellowish at base, but darker towards extremities, vertical, armed with teeth along the margin on the underside.

Maxillæ pale yellow, short, strong and rounded at extremity, furnished with a few short strong black hairs.

Labium somewhat darker than maxillæ, short, semicircular, but slightly pointed at apex.

Sternum dark mahogany-brown, cordate, sparingly clothed with short sessile hairs.

Abdomen ovate, moderately convex and slightly projecting over base of cephalothorax; superior surface sparingly clothed with short yellowish hairs; palish yellow, a large leaf-like brown mark with sinuous lateral edges extending along the middle and tapering towards the spinnerets; within the leaf-like mark the colour is mottled brown and yellow, but is darkest at the posterior extremity; there is also a dark brown mark, which is broadest and sinuous towards its anterior extremity, running down the centre of the leaf-like mark towards the spinnerets; the sides are dark brown near the superior surface, and the margins sinuous; towards the inferior surface the sides are mottled brown and

yellow; underside hairy; dull brown colour along the middle, yellowish at sides.

Epigyne a short blunt process.

Hab.—Bungendore.

EPEIRA PRONUBA, sp.nov. (Plate x. figs. 2, 2a, 2b, 2c, 2d.)

 $\mathbb{Q}.$  Cephalothorax, 2 mm. long; abdomen, 3 mm. long, 2 mm. broad.

Cephalothorax pale yellow, moderately convex, longer than broad. Caput slightly elevated, somewhat darker at base than at apex, rounded on the sides and upper part; normal grooves and indentations distinct. Clypeus moderately convex, pale yellow, with faint lateral striations radiating from near centre. Marginal band narrow and rather darker than clypeus.

Eyes glossy black; the four comprising the central group forming a square or nearly so; lateral pairs minute, placed obliquely on tubercles, and not contiguous.

Legs pale yellow, slightly darkest at tarsal joints, long, moderately strong, and tapering, furnished with short hairs and numerous long spines; each tarsus terminated with four claws, those of the posterior pair with sustentacula; relative length of legs, 1, 2, 4, 3; those of the first pair the longest, the second and fourth pairs of equal length, the third pair much the shortest.

Palpi moderately long, similar in colour and armature to the legs.

Falces strong, pale yellow, furnished with a few long black bristles and armed with teeth along the margins of the furrow of each falx; fangs pale yellow also, but deepening to reddish-brown at the points.

Maxillæ somewhat club-shaped, pale yellow, inclining inwards towards labium, furnished with a few rather long yellowish bristles.

Labium also pale yellow, short, broad, rounded off at apex, where it is fringed with coarse black hairs or bristles.

Sternum cordate, pale yellow, sparingly clothed with short sessile hairs.

Abdomen obovate, moderately convex, slightly projecting over base of cephalothorax; superior surface silvery-grey, mottled with yellowish-brown and furnished with minute hoary hairs; a small but tolerably prominent yellow-brown mark towards the anterior extremity and seated at the centre. The inferior surface of a dull yellow colour.

Epigyne a short blunt dark process directed forwards. Hab.—Bungendore.

## Family THERIDIIDÆ.

The spiders of this family are exceedingly interesting, and many of them are remarkable for their brilliancy of coloration, in which respect the specimen herein described (Theridion margaritarium, which I so name on account of the strong resemblance of the superior surface of its abdomen to mother-of-pearl) is a striking example. Bush and scrub lands, orchards, gardens, the crevices of walls and rocks, and the interior of buildings are the situations in which the Theridiidae most abound. Their snares have no claim to architectural skill, but are constructed without any apparent plan or design, and are composed of very fine lines which cross and interlace each other from every conceivable angle or point.

## Genus THERIDION, Walck.

Theridion margaritarium, sp.nov. (Plate x. figs. 3, 3a, 3b, 3c.)

Q. Cephalothorax, 2 mm. long, 1.5 mm. broad; abdomen, 4 mm. long, 1 mm. broad.

Cephalothorax pale yellow, moderately convex. Caput elevated, rounded on the sides and upper part, compressed in front, tinged with red at base. Clypeus pale yellow, convex, with a deep longitudinal groove running its entire length, the edges of which are slightly tinged with red; a few short white hairs are distributed

over its surface. Marginal band narrow, tinged with red, and sparingly fringed with short white hairs.

Eyes of pearl-grey lustre with a black band; the four centrals the largest of the group, forming a square; the posterior pair separated from the front pair by a space equal to the diameter of one eye, each of them separated from the other on its side by an equal distance; the lateral eyes the smallest of the group, placed in pairs contiguous to each other, obliquely on tubercles.

Legs long, pale yellowish; the trochanter, femur, and tibia of each leg of the first, second, and third pairs with faint reddish annulations, but of those of the fourth pair the femur and tibia alone are so banded; there are also dark red annulations at the joints of each leg; all are furnished with short whitish hairs and spines, the hairs being the longest and strongest on the underside of the metatarsi and tarsi; each tarsus terminated with four claws; relative length of legs, 1, 4, 2, 3, the first and fourth pairs equal, the second slightly shorter, and the third much so.

Palpi pale yellowish, short, and similar in armature to the legs; each terminated with a rather long curved red claw.

 $\it Falces$  concolorous, vertical, moderately strong, furnished with a few short blackish hairs; fangs red.

Maxillæ and labium pale yellowish; the former short, broad at the apex, inclined inwards, and furnished with a few short dark hairs. Labium short, broad, rounded off at the apex, and fringed with dark hairs.

Sternum cordate, pale yellow, sparingly clothed with short yellowish hairs.

Abdomen obovate, convex, slightly projecting over base of cephalothorax; bright and iridescent like mother-of-pearl; a large greyish patch in centre of superior surface, in front of which is a curved band of rose-tinted colour, the curvature directed backwards and laterally; at the posterior portion there are two small elevations, each of them taking a slightly outward direction; their margins rose-tinted; the superior surface and sides indented with numerous though somewhat irregular hexagonal depressions or cells, the depths of which are of a pearl

lustre, and their margins tinged with red; a few short hoary hairs are scattered over the superior surface and sides. Inferior surface pale yellow, furnished with short yellowish hairs.

Epigyne reddish-brown, broad, anterior margin curved, lower margin indented at middle.

Hab.—Clarence River.

#### Family THOMISIDÆ.

Sub-Family STEPHANOPISIDÆ.

Genus STEPHANOPIS, Cambr.

STEPHANOPIS HIRSUTA, sp.nov. (Plate x. figs. 4, 4a, 4b, 4c, 4d, 4e, 4f.)

Q. Cephalothorax, 4 mm. long; abdomen 6 mm. long.

Cephalothorax nearly as broad as long, somewhat convex. Caput elevated, sloping forward, deeply cleft, with a shallow indentation commencing in front, separating the two central eyes, running to the base of the cephalic eminence, besides which there are also several tubercles scattered over its surface; colour yellow-brown, the tubercles dark, approaching bistre. Clypeus yellow-brown, the tubercles similar in colour to those seated on the cephalic eminence, and radiating from the centre to the marginal band; its surface clothed with short coarse yellow-brown hairs. Marginal band narrow, fringed with tawny hairs.

Eyes forming a ring or corona around the upper part of the cephalic eminence, four of them being seated at the back in a slightly curved row—the curvature being directed downwards towards the sides; these are equal in size, equidistant, each being separated from its neighbour by a distance subequal to its diameter; front lateral eyes somewhat larger than those of the hinder row, and separated from each other by fully the diameter of two eyes; front central eyes much the smallest of the eight, seated lower down the cephalic eminence than the laterals, but each central eye situated nearer to the lateral eye than to each other.

Legs laterigrade, strong, moderately long, similar in colour to cephalothorax, clothed with short coarse tawny hairs; the trochanter and femur of each leg of the first and second pairs furnished on the upper side with long and strong tubercles, which are directed forwards and densely clothed with short tawny hairs, and on the under side with short but powerful spines which lie parallel to the joint on which they are located; the tibia, metatarsus, and tarsus of those legs are furnished with much longer hairs and spines than the second and third joints, but are not furnished with tubercles; the third and fourth pairs somewhat lighter in colour than the first and second, their tubercles and spines not so strong and prominent as those of the anterior pairs; the hairs of each metatarsus and tarsus darkest on the under side; relative length of legs, 1, 2, 4, 3, the first and second pairs co-equal, or nearly so, and much the strongest.

Palpi short, strong, and similar in colour and armature to the legs.

Falces strong, and moderately long, yellow-brown, furnished with rather long coarse black hairs or bristles; fangs black.

Maxillæ dark brown, moderately long, converging inwards, fringed with coarse black hairs.

Labium concolorous, moderately long, broad, rounded off at apex; fringed with coarse black hairs.

Sternum nearly round, yellow-brown, thickly clothed with short tawny hairs.

Abdomen obovate, slightly projecting over the base of the cephalothorax, somewhat truncate in front, and slightly notched; superior surface thickly clothed with short tawny hairs, rough and uneven, furnished along the sides with short tubercles; hinder part higher and broader than the fore extremity, strongly rugulose, and furnished with short tubercles; the colour yellow-brown, but darkest in front and down the centre; sides yellow-brown, rugulose; inferior surface rugulose, yellow-brown, and thickly clothed with short dark hairs.

Epigyne slightly raised, somewhat circular in form, depressed in the middle.

Hab.—Clarence River.

#### EXPLANATION OF PLATE X.

g. 1. — Epëira Leai.

Fig. 2. —E. pronuba.

Fig. 2a.— ,, profile of abdomen.

Fig. 2b. — ,, maxillæ and lip.

Fig. 2c. — ,, tarsus.

Fig. 2d.— ,, epigyne, in profile.

Fig. 3. —Theridion margaritarium.

Fig. 3a.- ,, sternum, maxillæ, labium, and coxæ.

Fig. 3b.— ,, epigyne.

Fig. 3c.— ,, eyes.

Fig. 4. -Stephanopis hirsuta.

Fig. 4a.— ,, ,, caput as viewed from the back, showing arrangement of 2nd row of eyes.

Fig. 4b.—Stephanopis hirsuta, caput as viewed from the front, showing arrangement of 1st row of eyes.

Fig. 4c.—Stephanopis hirsuta, cephalothorax and palpi as viewed behind and above.

Fig. 4d.—Stephanopis hirsuta, sternum, maxillæ, labium, and coxæ.

Fig. 4e. — ,, ,, tibia, metatarsus, and tarsus of front right leg.

Fig. 4f. -Stephanopis hirsuta, epigyne.